

## General

### Guideline Title

Best evidence statement (BESt). Using formal communication to collaborate with schools for children with asthma.

### Bibliographic Source(s)

Cincinnati Children's Hospital Medical Center. Best evidence statement (BESt). Using formal communication to collaborate with schools for children with asthma. Cincinnati (OH): Cincinnati Children's Hospital Medical Center; 2012 Apr 10. 5 p. [6 references]

### Guideline Status

This is the current release of the guideline.

# Recommendations

## Major Recommendations

The strength of the recommendation (strongly recommended, recommended, or no recommendation) and the quality of the evidence  $(1a\hat{a} \in `5b)$  are defined at the end of the "Major Recommendations" field.

It is recommended that formal communication between hospitals and school nurses/personnel be initiated to decrease school absences, emergency department (ED) visits, hospitalizations and to improve Asthma Control Test (ACT) scores among school-aged children with asthma (Bartholomew et al., 2006 [2b]; Byrne, Schreiber, & Nguyen, 2006 [5a]; Erickson et al., 2006 [4b]; Guglielmo & Little, 2006, [5a]; Wheeler et al., 2006 [5b]).

### Definitions:

Table of Evidence Levels

Quality Level	Definition
1a† or 1b†	Systematic review, meta-analysis, or meta-synthesis of multiple studies
2a or 2b	Best study design for domain
3a or 3b	Fair study design for domain
4a or 4b	Weak study design for domain
5a or 5b	General review, expert opinion, case report, consensus report, or guideline

Suality Level	Local Consensus

 $\dagger a = good \ quality \ study; \ b = lesser \ quality \ study$ 

Table of Recommendation Strength

Strength	Definition
It is strongly recommended that It is strongly recommended that not	When the dimensions for judging the strength of the evidence are applied, there is high support that benefits clearly outweigh risks and burdens (or visa-versa for negative recommendations)
It is recommended that It is recommended that not	When the dimensions for judging the strength of the evidence are applied, there is moderate support that benefits are closely balanced with risks and burdens.
There is insufficient evidence and a lack of consensus to make a recommendation	

See the original guideline document for the dimensions used for judging the strength of the recommendation.

# Clinical Algorithm(s)

None provided

# Scope

# Disease/Condition(s)

Asthma

# Guideline Category

Management

Prevention

# Clinical Specialty

Emergency Medicine

Family Practice

Internal Medicine

Pediatrics

Pulmonary Medicine

### **Intended Users**

Advanced Practice Nurses

Nurses

Physician Assistants

Physicians

Respiratory Care Practitioners

### Guideline Objective(s)

To evaluate, among school aged children with asthma, if formal communication/education with school nurses/personnel compared to no formal communication/education reduces emergency department (ED)/hospital admissions, decreases school absences and improves Asthma Control Test (ACT) scores (>20)

## **Target Population**

School-aged children (kindergarten to 12th grade) with asthma

### **Interventions and Practices Considered**

Formal communication between hospitals and school nurses/personnel

### Major Outcomes Considered

- Emergency department (ED)/hospital admissions rates
- School absence rates
- Asthma Control Test (ACT) scores

# Methodology

### Methods Used to Collect/Select the Evidence

Searches of Electronic Databases

# Description of Methods Used to Collect/Select the Evidence

Search Strategy

Databases: Ovid, CINAHL, Medline, PubMed

Search terms: Asthma, school nurse, hospitalization, emergency services, school age children

Filters: English language, school aged children

Dates searched: 2006-2012

Last date searched: September 29, 2011

### Number of Source Documents

## Methods Used to Assess the Quality and Strength of the Evidence

Weighting According to a Rating Scheme (Scheme Given)

## Rating Scheme for the Strength of the Evidence

Table of Evidence Levels

Quality Level	Definition
1a† or 1b†	Systematic review, meta-analysis, or meta-synthesis of multiple studies
2a or 2b	Best study design for domain
3a or 3b	Fair study design for domain
4a or 4b	Weak study design for domain
5a or 5b	General review, expert opinion, case report, consensus report, or guideline
5	Local Consensus

 $\dagger a = good quality study; b = lesser quality study$ 

## Methods Used to Analyze the Evidence

Systematic Review

# Description of the Methods Used to Analyze the Evidence

Not stated

### Methods Used to Formulate the Recommendations

Expert Consensus

## Description of Methods Used to Formulate the Recommendations

Not stated

# Rating Scheme for the Strength of the Recommendations

Table of Recommendation Strength

Strength	Definition
It is strongly recommended that It is strongly recommended that	When the dimensions for judging the strength of the evidence are applied, there is high support that benefits clearly outweigh risks and burdens (or visa-versa for negative recommendations)

Strength It is recommended that It is recommended that not	Definition When the dimensions for judging the strength of the evidence are applied, there is moderate support that benefits are closely balanced with risks and burdens.	
There is insufficient evidence and a lack of consensus to make a recommendation		

See the original guideline document for the dimensions used for judging the strength of the recommendation.

## Cost Analysis

A formal cost analysis was not performed and published cost analyses were not reviewed.

### Method of Guideline Validation

Peer Review

## Description of Method of Guideline Validation

This Best Evidence Statement has been reviewed against quality criteria by 2 independent reviewers from the Cincinnati Children's Hospital Medical Center (CCHMC) Evidence Collaboration.

# **Evidence Supporting the Recommendations**

# References Supporting the Recommendations

Bartholomew L, Sockrider M, Abramson S, Swank P, Cryzewski D, Tortolero S, Markham C, Fernandez M, Shegog R, Tyrrell S. Partners in school management: evaluation of a self-management program for children with asthma. J Sch Nurs. 2006;76(6):283-90.

Byrne J, Schreiber M, Nguyen T. Community hospital-school partnership to treat asthma episodes at school and improve management. J Sch Health. 2006;76(6):336-9.

Erickson C, Splett P, Mullett S, Jensen C, Belseth S. The healthy learner model for student chronic conditions management - Part II: the asthma initiative. J Sch Nurs. 2006;22:319-29.

Guglielmo C, Little A. Tragedy in a beachfront community: a proactive school district responds to asthma. J Sch Health. 2006;76(6):297-9.

Wheeler L, Merkle S, Gerald L, Taggart V. Managing asthma in schools: lessons learned and recommendations. J Sch Health. 2006;76(6):340-4.

## Type of Evidence Supporting the Recommendations

The type of supporting evidence is identified and graded for each recommendation (see the "Major Recommendations" field).

# Benefits/Harms of Implementing the Guideline Recommendations

### Potential Benefits

- Reduced emergency department (ED)/hospital admissions
- Decreased school absences
- Improve asthma control test (ACT) scores

### **Potential Harms**

Not stated

# Qualifying Statements

## **Qualifying Statements**

This Best Evidence Statement addresses only key points of care for the target population; it is not intended to be a comprehensive practice guideline. These recommendations result from review of literature and practices current at the time of their formulation. This Best Evidence Statement does not preclude using care modalities proven efficacious in studies published subsequent to the current revision of this document. This document is not intended to impose standards of care preventing selective variances from the recommendations to meet the specific and unique requirements of individual patients. Adherence to this Statement is voluntary. The clinician in light of the individual circumstances presented by the patient must make the ultimate judgment regarding the priority of any specific procedure.

# Implementation of the Guideline

## Description of Implementation Strategy

An implementation strategy was not provided.

## **Implementation Tools**

Audit Criteria/Indicators

For information about availability, see the Availability of Companion Documents and Patient Resources fields below.

# Institute of Medicine (IOM) National Healthcare Quality Report Categories

### IOM Care Need

Living with Illness

Staying Healthy

### **IOM Domain**

Patient-centeredness

# Identifying Information and Availability

## Bibliographic Source(s)

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### Adaptation

Not applicable: The guideline was not adapted from another source.

### Date Released

2012 Apr 10

## Guideline Developer(s)

Cincinnati Children's Hospital Medical Center - Hospital/Medical Center

## Source(s) of Funding

Cincinnati Children's Hospital Medical Center

### Guideline Committee

Not stated

## Composition of Group That Authored the Guideline

Team Leader/Author: Lisa Devoto, BSN, RN, CPN, RRT, AE-C, Asthma Coordinator, Division of Respiratory Care

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Clinical Support/Consultant: Barbara Giambra, MS, RN, CPNP, Evidence-Based Practice Mentor, Center for Professional Excellence/Research and Evidence-Based Practice

### Financial Disclosures/Conflicts of Interest

No financial conflicts of interest were found.

### Guideline Status

Guideline Availability Electronic copies: Available from the Cincinnati Children's Hospital Medical Center Web site Print copies: For information regarding the full-text guideline, print copies, or evidence-based practice support services contact the Cincinnati Children's Hospital Medical Center Health James M. Anderson Center for Health Systems Excellence at EBDMInfo@cchmc.org. Availability of Companion Documents The following are available: • Judging the strength of a recommendation. Cincinnati (OH): Cincinnati Children's Hospital Medical Center; 2008 Jan. 1 p. Available from the Cincinnati Children's Hospital Medical Center Web site • Grading a body of evidence to answer a clinical question. Cincinnati (OH): Cincinnati Children's Hospital Medical Center; 1 p. Available from the Cincinnati Children's Hospital Medical Center Web site • Table of evidence levels. Cincinnati (OH): Cincinnati Children's Hospital Medical Center; 2008 Feb 29. 1 p. Available from the Cincinnati Children's Hospital Medical Center Web site Print copies: For information regarding the full-text guideline, print copies, or evidence-based practice support services contact the Cincinnati Children's Hospital Medical Center Health James M. Anderson Center for Health Systems Excellence at EBDMInfo@cchmc.org. In addition, suggested process or outcome measures are available in the original guideline document Patient Resources None available NGC Status This NGC summary was completed by ECRI Institute on June 26, 2012. Copyright Statement This NGC summary is based on the original full-text guideline, which is subject to the following copyright restrictions: Copies of this Cincinnati Children's Hospital Medical Center (CCHMC) Best Evidence Statement (BESt) are available online and may be distributed by any organization for the global purpose of improving child health outcomes. Examples of approved uses of the BESt include the following: · Copies may be provided to anyone involved in the organization's process for developing and implementing evidence based care • Hyperlinks to the CCHMC website may be placed on the organization's website • The BESt may be adopted or adapted for use within the organization, provided that CCHMC receives appropriate attribution on all written or electronic documents

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appreciated.

Copies may be provided to patients and the clinicians who manage their care

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